भारतीय मानक

IS 10939 : 2023

Indian Standard

स्वचल वाहनों के टायर ट्यूब वाल्वों के लिए पदनाम प्रणाली

(दूसरा पुनरीक्षण)

Designation System for Tyre Tube Valves for Automotive Vehicles

(Second Revision)

ICS 43.040.60; 83.160

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July 2023

Price Group 5

Automotive Tyres, Tubes and Rims Sectional Committee, TED 07

FOREWORD

This Indian Standard (Second Revision) which was first published in 1984 and was later revised in 2000. This second revision incorporates the experience gained with the use of this standard and brings the standard in line with the latest development in the field, it also incorporates all the amendments of first revision.

The valve designations system covered in this standard has been evolved for identifying the valves on their major functional as well as basic dimensional characteristics. The system has been developed with a view that it could help in easy identification of valve type and application and the designations should be such that it could be marked on the valve stem or base. This valve designation system has been used to designate valves in IS 9081 : 2017 ‘Valves and valve accessories for tyre tube valves for automotive vehicles (*fifth revision*)’.

A list of widely used valves with their valves designations along with old TR codes are given in Annex A of IS 9081 : 2017 ‘Automotive vehicles — Valves and valve accessories for pneumatic tyres — Specification (*fifth revision*)’.

The composition of the Committee responsible for formulation of this standard is given in Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

DESIGNATION SYSTEM FOR TYRE TUBE VALVES FOR AUTOMOTIVE VEHICLES

(Second Revision)

1 SCOPE

This standard specifies designation system for tyre tube valves used in the following types of automotive vehicles:

a) Mopeds;
b) Motorcycles;
c) Scooters and scooter derivatives;
d) Passenger cars;
e) Light trucks;
f) Trucks and buses;
g) Agricultural tractors and trailers, and off-the-road vehicles;
h) Industrial trucks; and
j) Earthmoving machines

2 REFERENCES

This standard does not contain any cross-reference standard.

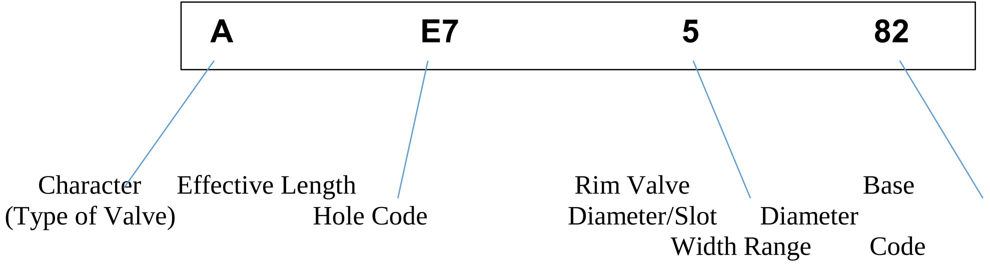
3 DESIGNATION SYSTEM

3.1 A 6 character alpha-numeric code comprising of functional characteristics taken in the order of their importance. This has been explained by the illustration. The significance of characters shall be as given in **3.1.1** to **3.1.4.**

3.1.1 First character shall denote the type of valve and shall be represented by an alphabet.

Character (*Type of Value*)	*Significance*
A	Tube type valve, rubber based, standard bore, external threading 8V1.
B	Tube type valve, rubber covered, standard bare, external threading 8V1.
E	Tube type valve, screw-on type, large bore, external threading 12V1.
F	Tubeless type valve, rubber covered snap-in type, standard bore, external threading 8V1.
L	Tube type valve, spud, large bo external threading 12V1.
M	Tube type valve, spud, large bore, external threading 17V2.
R	Tube or tubeless extension assembly large bore, external threading 17V3.
S	Tube or tubeless valve, spud, large bore, external threading 17V3.

Illustration


A
E7
5
82
Character (Type of Valve)
Effective Length Hole Code
Rim Valve Diameter/Slot Width Range
Base Diameter Code

3.1.2 Second and third characters shall represent the effective length of the valve in the straight condition (before bending), by a code as given below:

Effective Length	*Code*
Up to 99 mm	Actual length in millimeters
Above 99 mm	Alpha-numeric code as per **3.1.2.1**

3.1.2.1 The effective lengths above 99 mm shall be codified as follows. However, in the code, the alphabets I, O and X shall not be used.

Effective Length (mm)	*Code*
100	A0
101	A1
102	A2
.	.
.	.
106	A6
109	A9
110	B0
.	.
.	.
.	.
115	B5
.	.
.	.
125	C5
.	.
.	.
.	.
165	G5
.	.
.	.
.	.
200	L5

3.1.3 Fourth Character shall represent the rim valve hole diameter or the rim valve slot width by the following code:

Sl No. (1)	*Type of Vehicle* (2)	*Valve Hole Diameter/Slot Width Range (mm)* (3)	*Code* (4)
i)	Scooters, mopeds, motor-cycles and passenger cars	8.4 - 8.8	1
ii)	Scooters and scooter derivatives	10 - 10.4	2
iii)	Passenger cars	11.3 - 11.7	3
iv)	Light trucks	12.7 - 13.5	4
v)	Truck, bus, passenger cars, agricultural tractors, industrial tractors and small off-the-road vehicles	15.7 - 16.1	5
vi)	Large valves for off-the-road vehicles	19 - 22	6
vii)	Tubeless applications off-the-road vehicles	20.5 - 21	7

NOTE — Codes ‘8’ and ‘9’ are for future development and code ‘0’ (zero) shall not be used.

3.1.4 Fifth and sixth characters shall represent the base diameter in code. For rubber base valves and rubber covered valves, it is the rubber base diameter and for screw-on or clamp-in type valves, it is the metal base diameter. The code shall be arrived in the same manner as explained in **3.1.2.**

ANNEX A

(*Foreword*)

COMMITTEE COMPOSITION

Automotive Tyres, Tubes and Rims Sectional Committee, TED 07

Organization	*Representative(s)*
In personal Capacity (*302, Celestina Apts. S. N 1841, Rambhu Kambale Path Shivajinagar, Pune*)	Shri D. P. Saste **(*Chairperson*)**
All India Motor Transport Congress, New Delhi	Shri Charan Singh Shri M. Murli (*Alternate*)
Ashok Leyland Limited, Chennai	Shri V. P. Gautam Shri Muthu Kumar N. (*Alternate*)
Association of State Road Transport Undertaking, New Delhi	Shri R. Chandrababu Shri Ullas Babu (*Alternate*)
Automotive Components Manufacturers Association, (ACMA)	Shri Uday Harite Ms. Seema Babal (*Alternate*)
Automotive Research Association of India, Pune	Shri A. Akbar Badusha Shri V. S. Khariratkar (*Alternate* I)
Automotive Tyre Manufacturers Association, New Delhi	Shri Rajiv Budhiraja Shri T. C. Kamath (*Alternate*)
Bajaj Auto Limited, Pune	Shri R. Narasimhan Shri Arvind V. Kumbhar (*Alternate*)
Central Institute of Road Transport, Pune	Shri N. R. Tiwari Shri V. D. Chavan (*Alternate* I)
Directorate General of Quality Assurance, Ministry of Defence, New Delhi	CQAV
Elastomer Technology Development Society, (ETDS)	Shri T. Chakravarty
Hero MotoCorp Limited, Dharuhera	Shri Piyush Chowdhry Shri Feroz Ali Khan (*Alternate* I)
Indian Foundation of Transport Research and Training, New Delhi	Shri S. P. Singh Shri J. S. Walia (*Alternate*)
International Centre for Automotive Technology, Manesar	Shri Amit Kumar Karwal
Indian Rubber Manufacturers Research Association, Thane	Dr. K. Raj kumar
Indian Tyre Technical Advisory Committee, New Delhi	Shri V. K. Misra Shri Niteesh Shukla (*Alternate*)

Organization	*Representative(s)*
International Centre of Automotive Technology, Manesar	Shri Amit Kumar Karwal Shri Vijayanta Ahuja (*Alternate*)
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Mahindra & Mahindra Limited, Mumbai	Shri Ram Singh Shri Vishwanathan T. (*Alternate* I)
Maruti Suzuki India Limited, Gurugram	Shri Gururaj Ravi Shri Raj Kumar Dwivedi (*Alternate*)
Minda Kosei Aluminum Wheels Private Limited, Bawal	Shri Hemant Parkhi Shri Narayan Giri (*Alternate*)
Ministry of Commerce and Industry, Department for Promotion of Industry and Internal Trade, New Delhi	Shri A. P. Singh Shri S. S. Gupta (*Alternate*)
Ministry of Road Transport & Highways, New Delhi	Director (Technical)
National Automotive Testing and R and D Infrastructure Project, Indore	Dr P. P. Chattaraj
Renault India Private Limited, Mumbai	Shri Rajendra Khile
Society of Indian Automobile Manufactures, New Delhi	Shri P. K. Banerjee Shri Amit Kumar (*Alternate*)
Steel Strips Wheels Limited	Shri Vimal P. Anand
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Triton Valves Limited, Bengaluru	Shri Bharath Chandrashekar Shri Deepak H. V. (*Alternate*)
Vehicles Research & Development Establishment, Ahmednagar	Shri S. Pal Shri P. P. Mahajan (*Alternate*)
Volvo Group India Private Limited, Bangalore	Shri Karthik Sarma Shri Pramod Kumar Hugar (*Alternate*)
Wheels India Limited, Chennai	Shri Sundararajan T.

Organization	*Representative(s)*
BIS Directorate General	Shri R. R. Singh, Scientist ‘F’/Senior Director and Head (Transport Engineering) [Representing Director General (*Ex-officio*)]

Member Secretary
Mr August Dubey
Scientist ‘B’/Assistant Director
(Transport Engineering), BIS

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Amend No.	Date of Issue	Text Affected

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